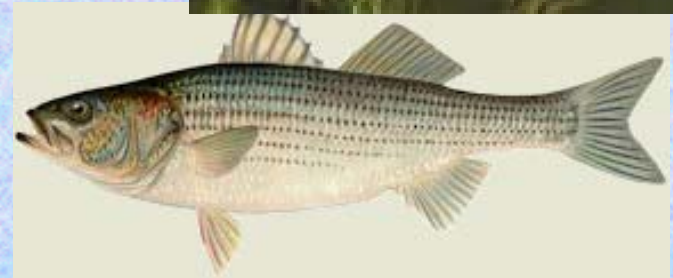


Purpose of Tributary Strategies

- Restore and protect aquatic habitat for living resources
- Reduce, and “cap” nutrient and sediment loads
- Identify control actions that are practical, cost-effective, and equitable
- Develop stakeholder involvement and commitments



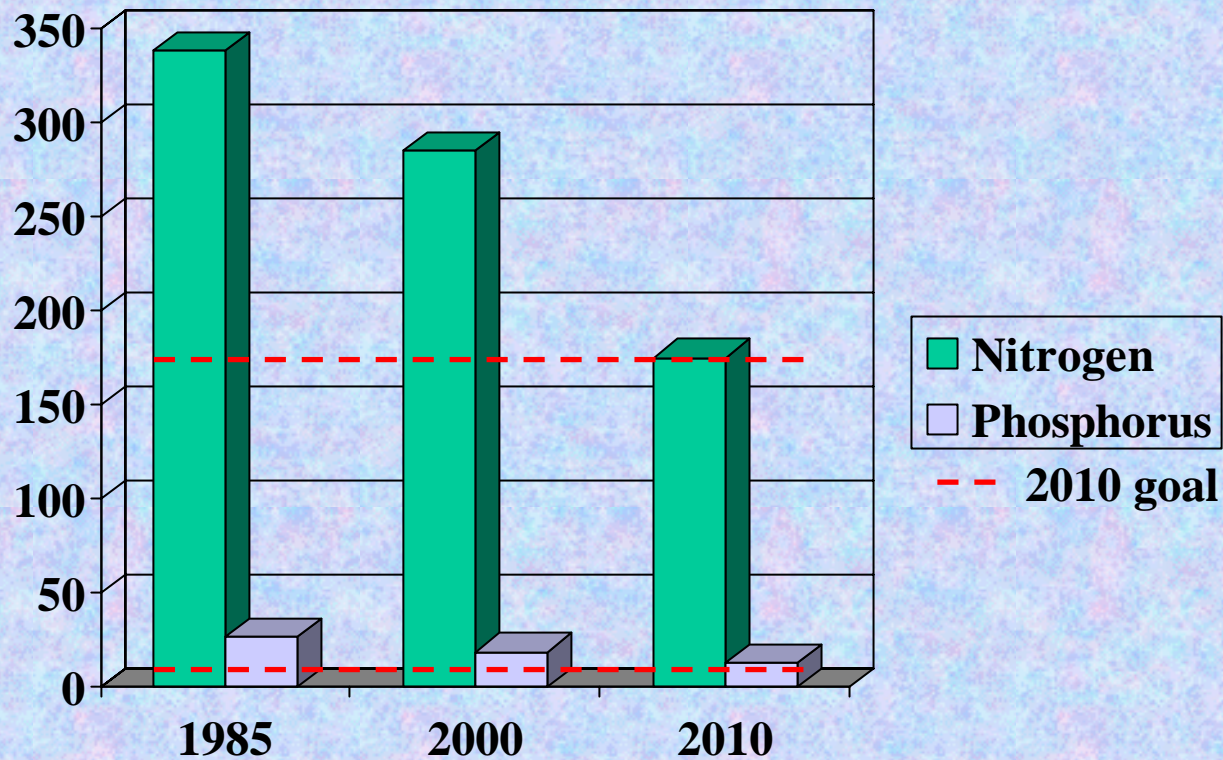
Basis for Tributary Strategy Program

- Actions can't start at water's edge
- Each basin is different
- Basins affect the bay differently
- Chesapeake Bay 2000 Agreement
- State Code – Tributary Strategies Act

Key Considerations for Revising Tributary Strategies

- Existing strategies serve as the starting point
- A voluntary, cooperative approach
- Seeking common agreement on what needs to be done
- Principles of cost-effectiveness, feasibility, and equity are key

Baywide N&P Change with 2010 Goal*



* *In millions of pounds per year.*

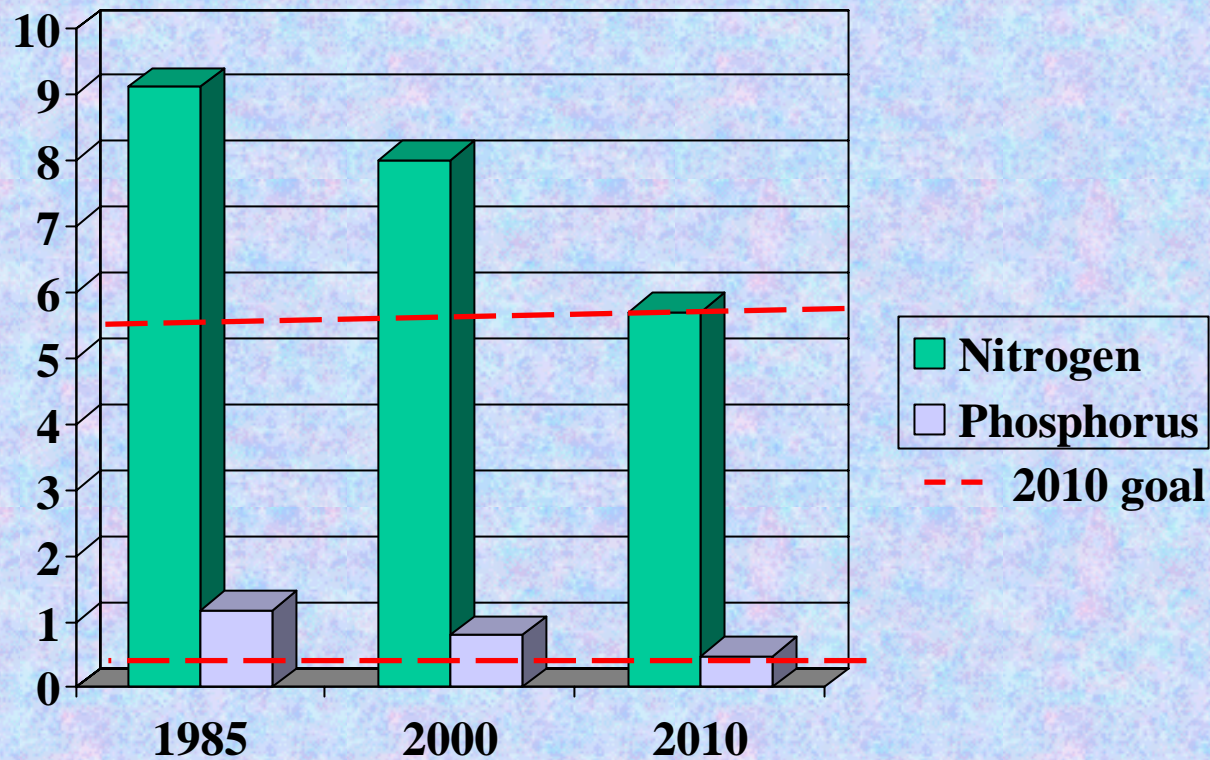
The York River Watershed

(a Basin “Snapshot”)

- Length: 200 miles
- Drainage: 1.7 million acres
- Counties: 17
- Population: 263,459
- Tributaries: Mattaponi, Pamunkey, South Anna, North Anna

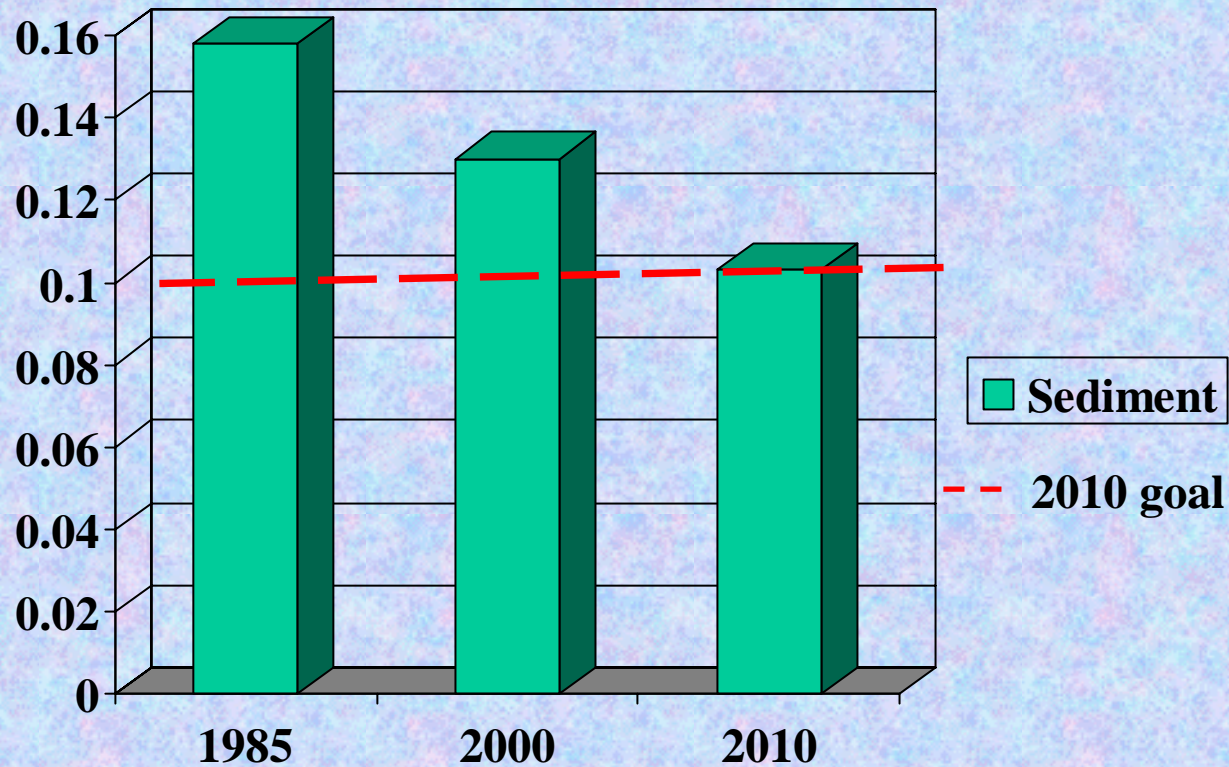


York River Basin N&P Change with 2010 Goal*



* *In millions of pounds per year.*

York River Basin Sediment Change with 2010 Goal*

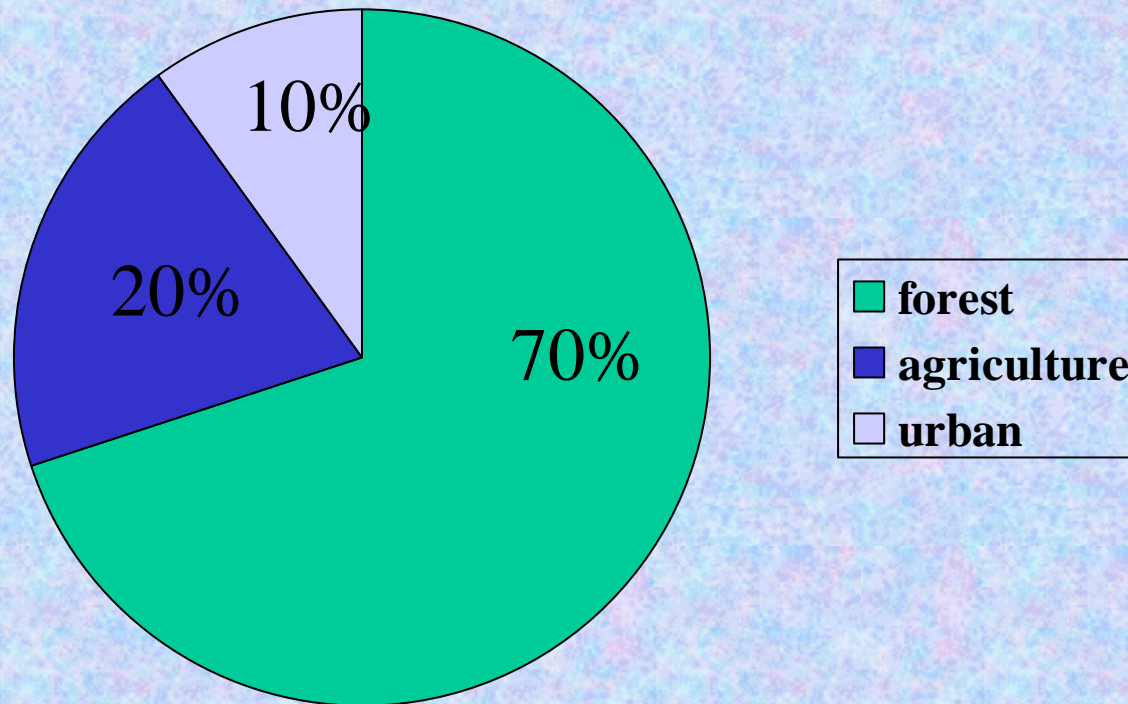


* *In tons per year.*

Reductions

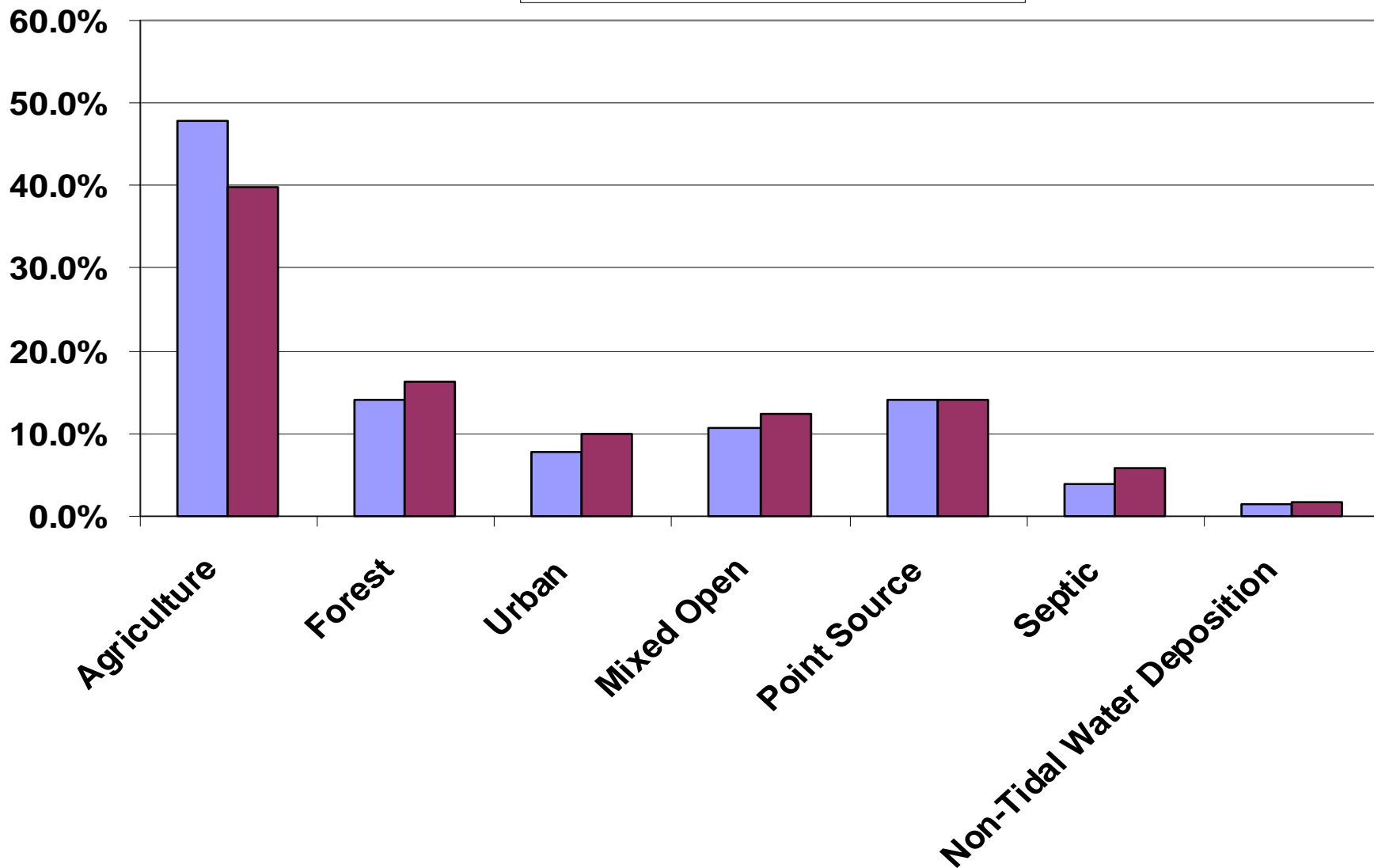
- Nitrogen (million pounds/year)
 - 1985: 9.70
 - 2000: 8.00 (-12%)
 - 2010 cap: 5.70 (-35%)
- Phosphorous (million pounds/year)
 - 1985: 1.18
 - 2000: 0.79 (-33%)
 - 2010 cap: 0.48 (-39%)
- Sediment (million tons/year)
 - 1985: 0.158
 - 2000: 0.130 (-18%)
 - 2010 cap: 0.103 (-21%)

Land Uses in the York River Watershed



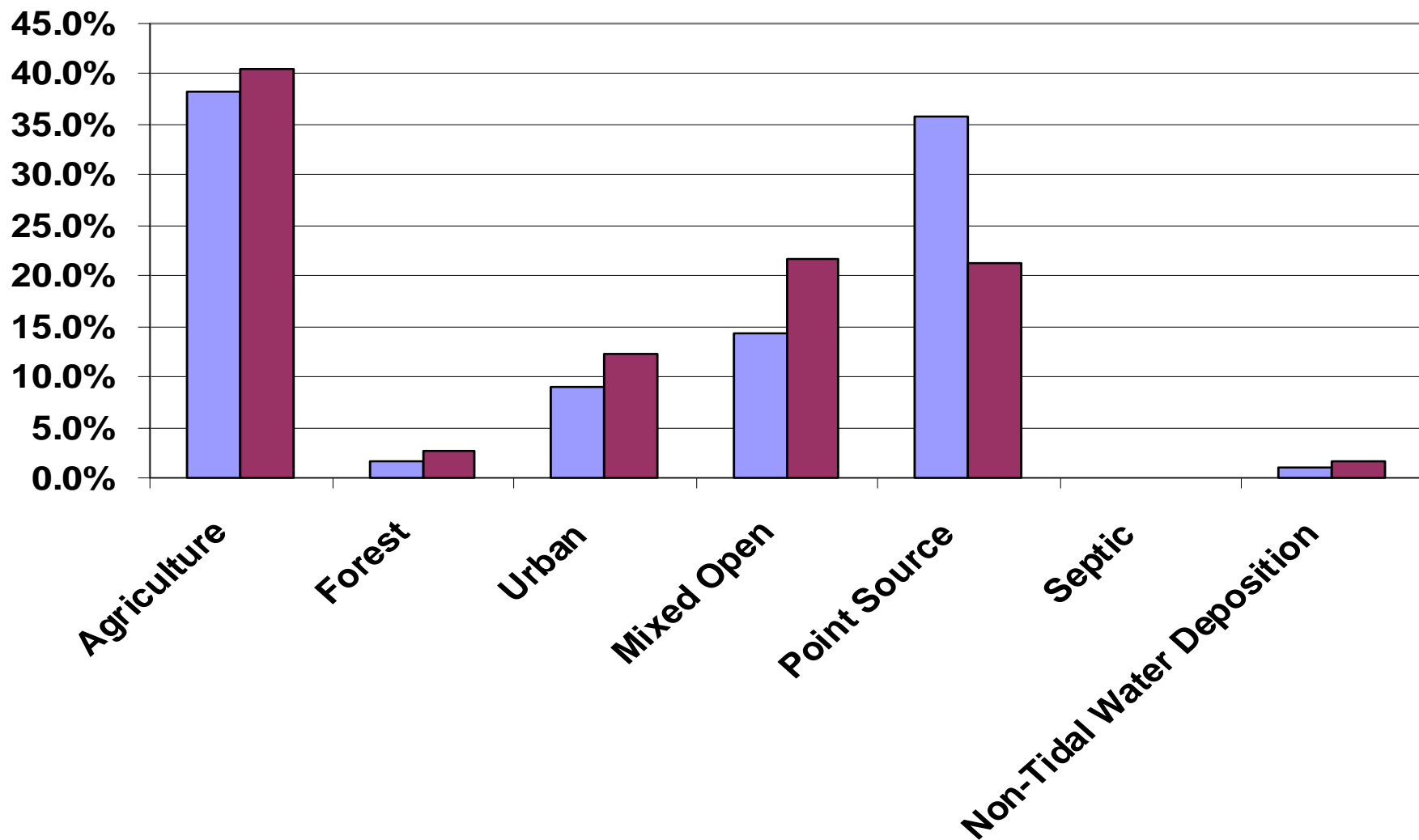
York River Basin Loadings by Source Category 1985 vs. 2000

1985 TN 2000 TN



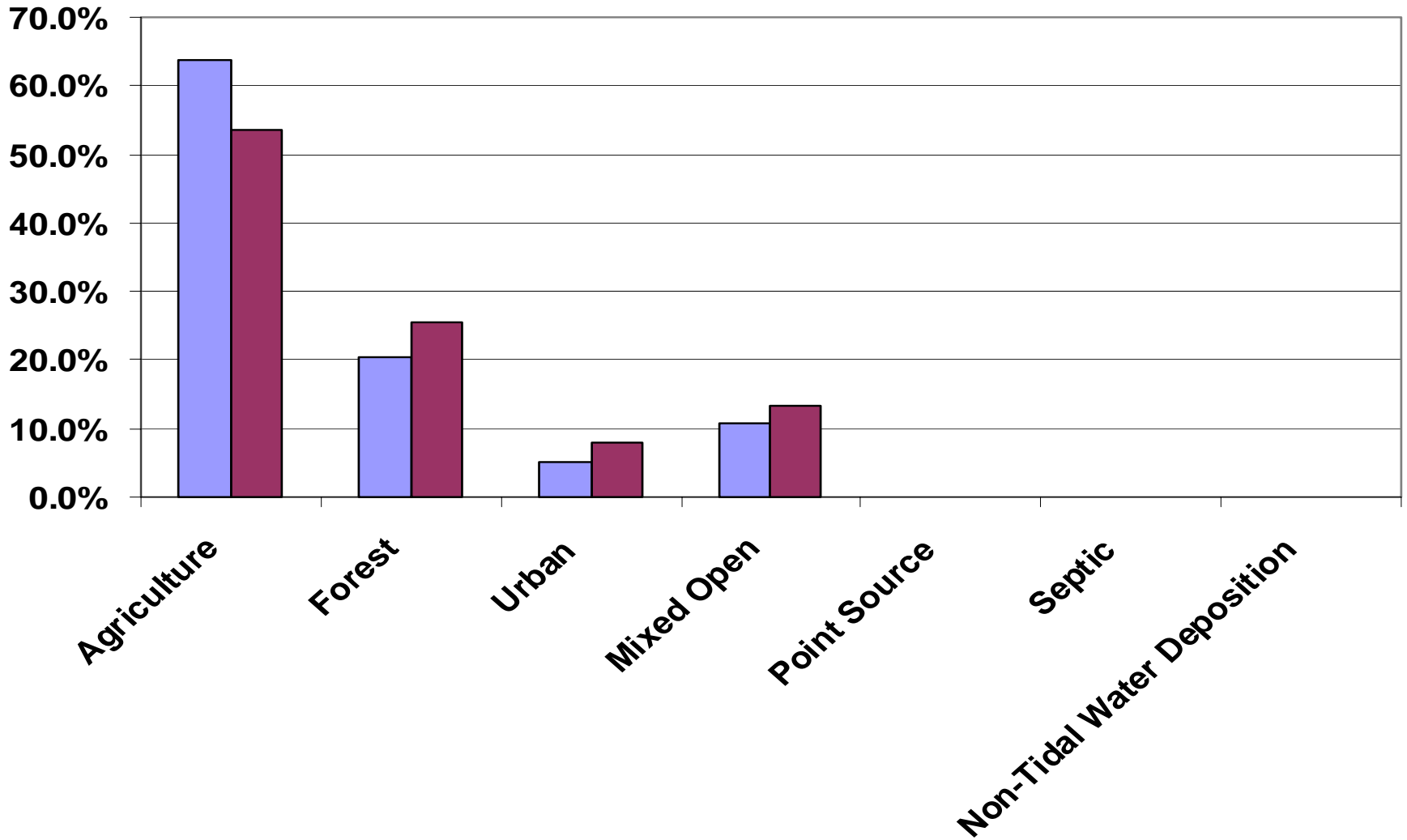
York River Basin Loadings by Source Category 1985 vs. 2000

1985 TP 2000 TP



York River Basin Loadings by Source Category 1985 vs. 2000

1985 SED 2000 SED



Potomac River

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Stakeholder Group:
Potomac Watershed Roundtable

Rappahannock River

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Stakeholder Group:
Rappahannock River Basin Commission

Shenandoah River

Team Leader: Tamara Keeler
Shenandoah Regional Manager
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Stakeholder Group:
Pure Water 2000

York River

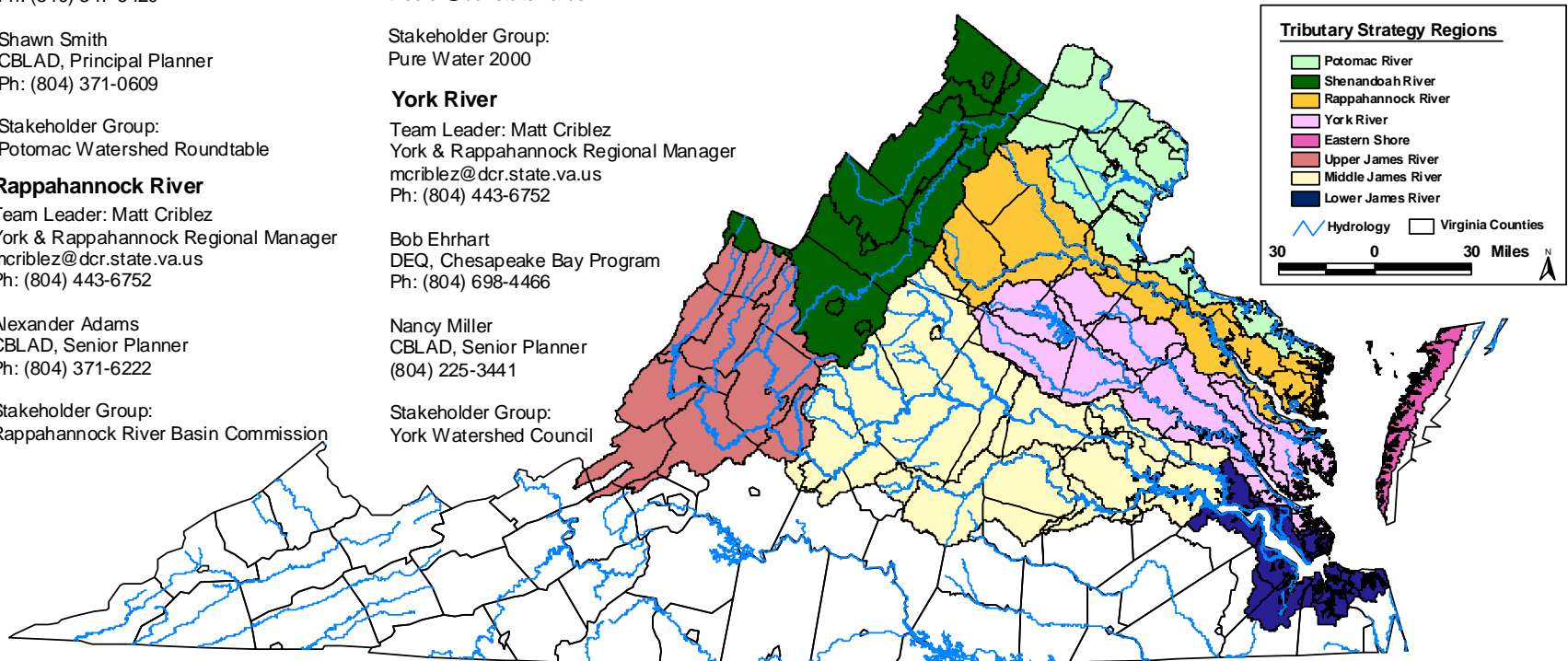
Team Leader: Matt Criblez
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Stakeholder Group:
York Watershed Council

Tributary Strategy Teams With Stakeholder Groups



Upper James River

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Stakeholder Group:
Upper James River Conservation Roundtable

Middle James River

Team Leader: Michael Bowman
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Stakeholder Group:
Piedmont James River Roundtable

Lower James River

Team Leader: Noah Hill
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Stakeholder Group:
Hampton Roads Lower James River Roundtable

Eastern Shore

Team Leader: Sara Grove
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Stakeholder Group:
Eastern Shore Watersheds Network

Stakeholder Involvement

“Basin Teams” to Include:

- Local government officials
- Planning district commissions
- Soil and water conservation districts
- Wastewater treatment facilities
- Conservation organizations
- Business interest groups
- Industry
- Citizens



Process: Local Planning

- Basin-specific process, local flexibility in meeting the goals
- “Basin team” will help define process
- Continual refinement of ongoing strategies to reflect new actions & commitments

Process: Local Planning (Cont)

- Expand participation to ultimately include all types of land users
- Accent on developing very local buy-in
- Prominence of local governments
- Public comment period

Where Do We Look for Reductions?

- Agricultural practices
- Waste-water treatment
- Educating the public
- **Urban/suburban storm water**
- **Land use, low impact development**

How Do We Look for Reductions?

- Reductions locally with existing resources
- Reductions locally requiring new resources
- Reductions from statewide initiatives

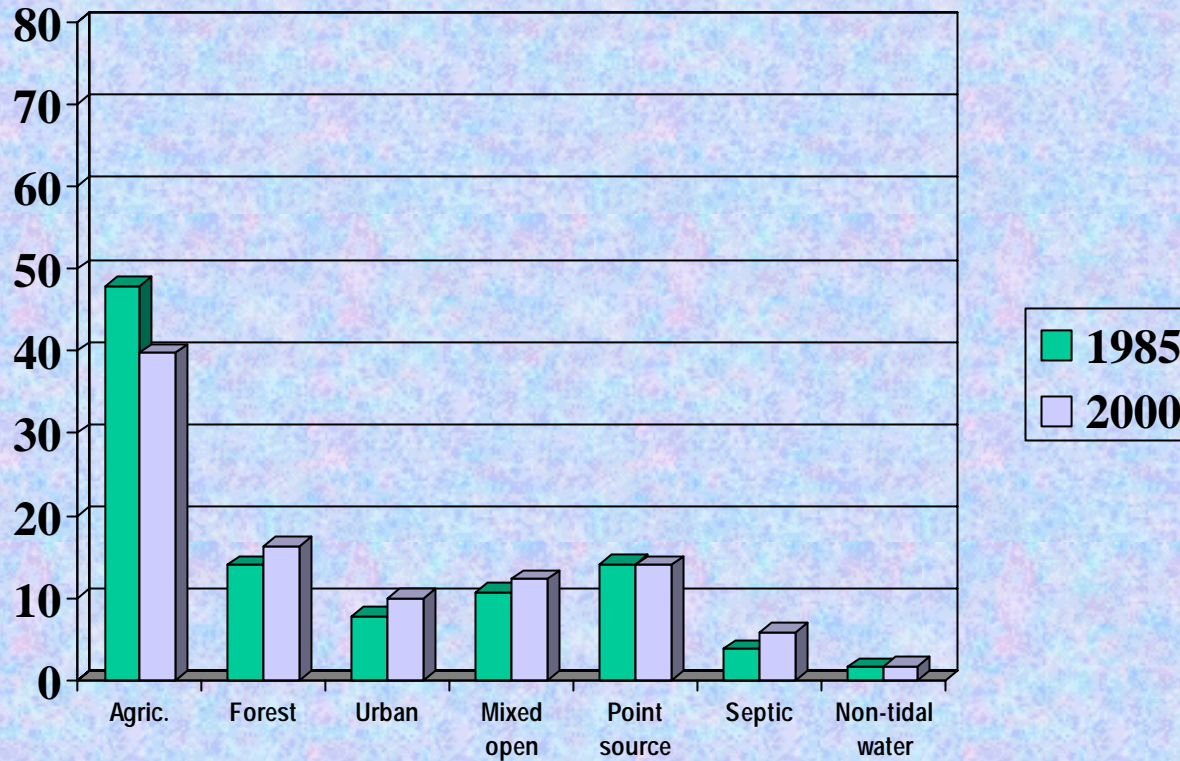
How Do We Look for Reductions?

- Loads by source categories
- Examine allocations by major sub-basin
- Loads by County
- Use “scenario builder” to explore options

Example of Available Data:

York River Basin Nitrogen Loadings* by Source Category

1985 v. 2000



**As percentage of whole*

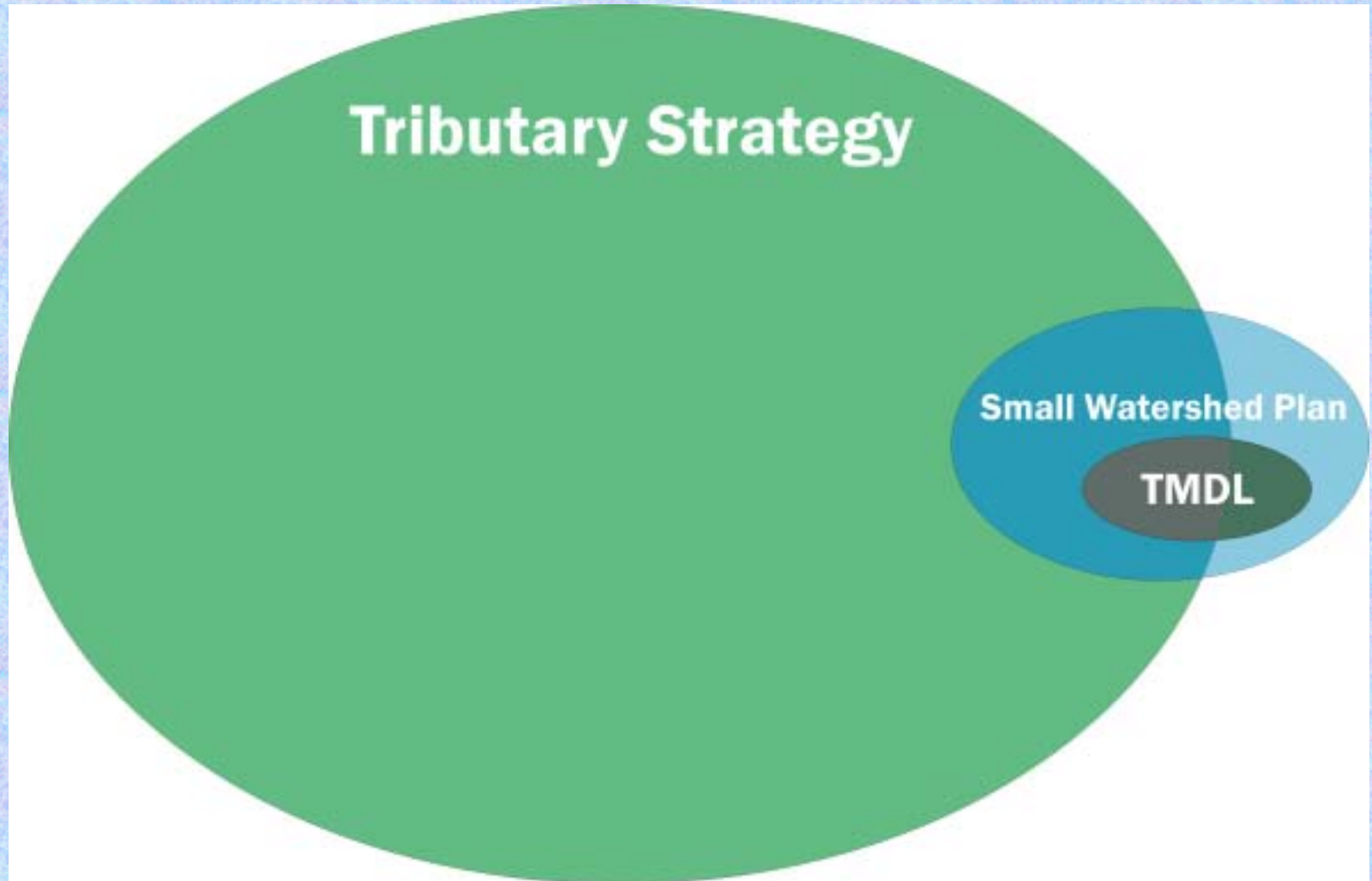
What's Included in the Revised Strategies?

- A “snapshot” of the basin
- A menu of reduction actions (Input Deck)
- Discussion of funding needs and options
- **Tracking method for loads, reductions and cap**
- Phased strategy implementation

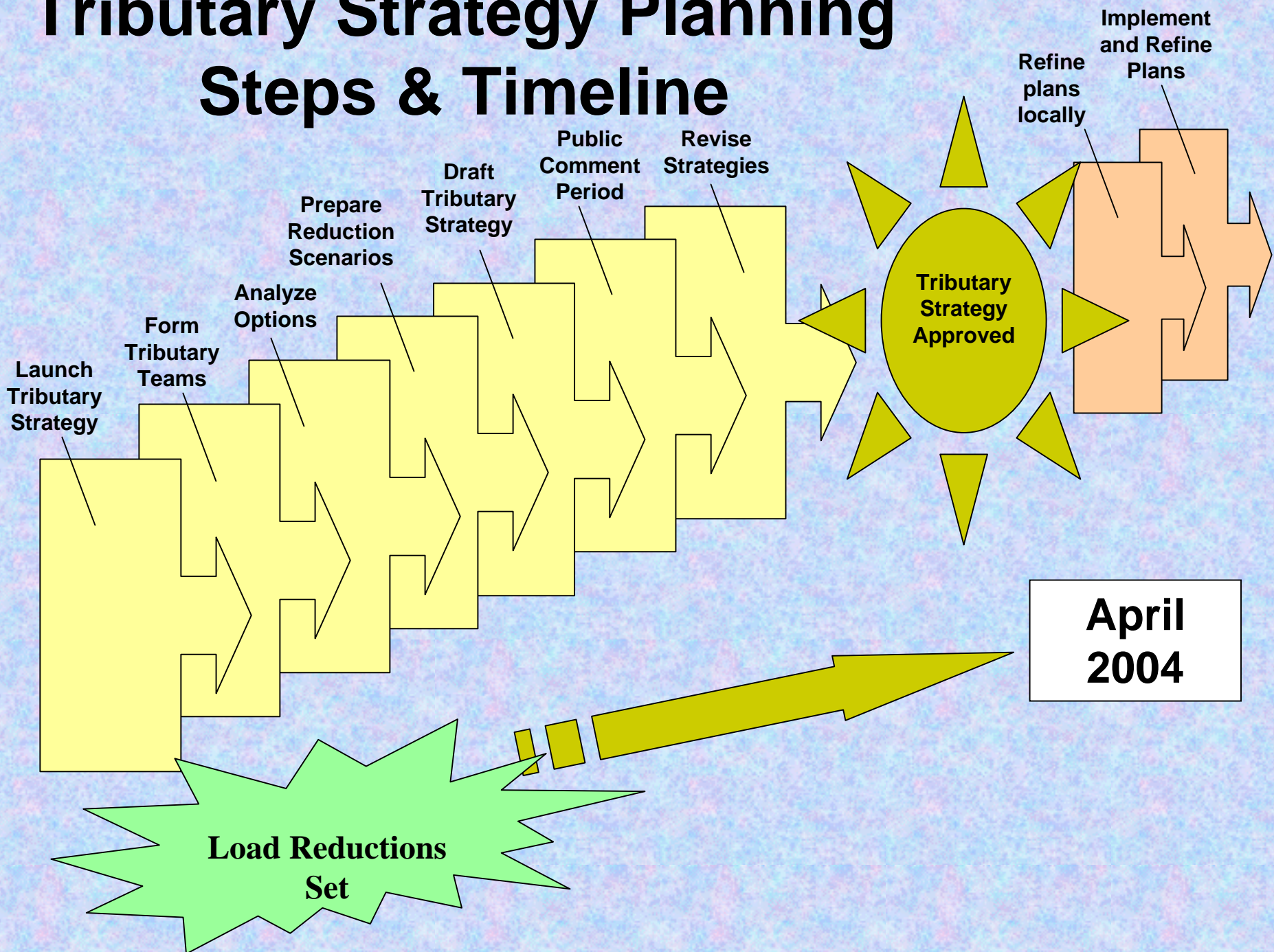
What's Included?

- Status/Progress of N,P,S reductions
- Specific Implementation Strategies

Nested Watershed Planning



Tributary Strategy Planning Steps & Timeline



Proposed Timeline

- Establishment of tributary team: July 03
- Tributary team reviews allocations and develops scenarios: July-December 03
- Draft Tributary Strategy: December 03
- Public meetings: January/February 04
- Revise Tributary Strategy: March/April 04
- Deliver completed Tributary Strategy: April 04

2004 - 2010

- Continual refinement of Tributary Strategy
- Living document
 - Implement existing programs, projects
 - Refine practices, costs, funding,
 - Identify and implement new/unique/innovative practices
 - Marketing strategy to engage new array of stakeholders

What is the next step?

- Establish a diverse, active tributary team
 - Team members that represent all sectors and regions of the basin
 - Hold Tributary Team meeting – End of July
 - Need Commitment by Members